



CHOCKFAST® Black

TECHNICAL DATA

High Temperature Chocking Compound

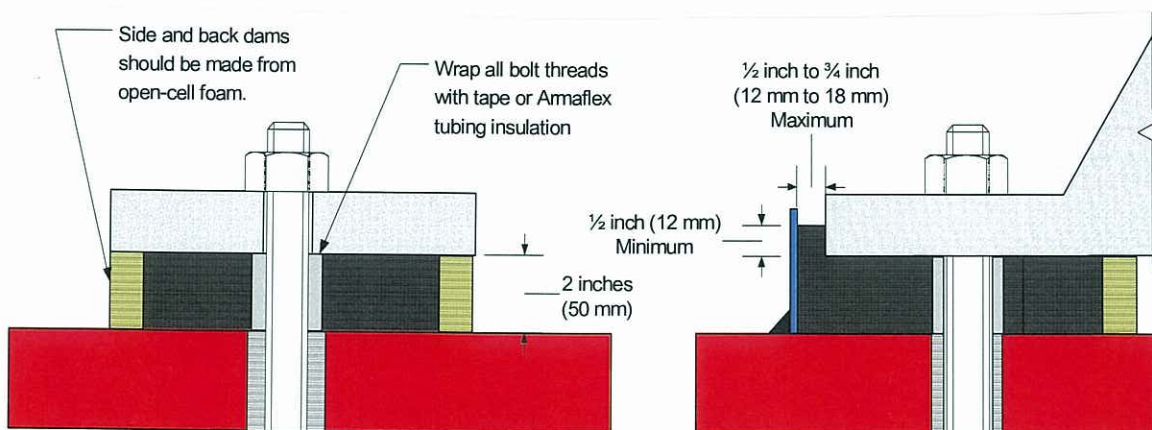
Description

Chockfast® Black is a specifically formulated 100% solids, inert filled casting compound developed for use as a chocking material. It is a cost-effective method of maintaining permanent precise alignment of critical equipment. It will withstand severe environments involving high physical and thermal shock.

This unique product is used under gas and diesel engines, compressors, generators, turbines, motors, pumps and various other types of equipment.

Chockfast® Black is ideal for use under these hot running reciprocating and rotating machines because of its excellent resistance to creep and fatigue at high operating temperatures. It is non-shrinking and has a very high impact and compressive strength. Resin chocks made with Chockfast Black reduce possible bearing or crankshaft damage because they (1) minimize heat build-up on foundations, (2) assure precise and unsurpassed contact with bedplates, and (3) provide a high coefficient of friction to help hold engines down tight. The excellent flowability of Chockfast Black allows it to fill voids in the chock area and conform to all surface irregularities

Chockfast® Black was designed to be a thick pour liquid chocking material. A chock depth of 2" (50mm) is standard; however, thinner or thicker pours can be made satisfactorily. The 2" (50mm) chock elevates equipment above the underlying foundation, which allows a free flow of air thereby reducing possible foundation humping problems. Contact ITW Polymers and Fluids for information regarding pours less than 1-1/4" (32mm) in thickness or greater than 2-1/2" (62mm) in thickness.



The information contained in this Technical Bulletin is as up to date and correct as possible as at the time of issue. The data provided should be used as a guide only as the performance of the product will vary depending on differing operating conditions and application methods.

The sale of any product described in this Technical Bulletin will be in accordance with ITW Polymers & Fluids Conditions Of Sale, a copy of which is available on request. To the extent permitted by law, ITW Polymers & Fluids excludes all other warranties in relation to this product.

Physical Properties

Compressive Strength	121.6 MPa	ASTM C-695 (modified)
Compressive Modulus of Elasticity	5600 MPa	ASTM C-695 (modified)
Linear Shrinkage	0.00018 mm/mm	ASTM D-2566
Coefficient of Linear thermal Expansion	0.000027/ ⁰ C @ 0 ⁰ C to 60 ⁰ C	ASTM D-696
Flexural Strength	43.5 MPa	ASTM C-580
Flexural Modulus of Elasticity	10,130 MPa	ASTM C-580
Tensile Strength	20.4 MPa	ASTM D-638
Shear Strength	35 MPa	FED-STD-406 (method 1041)
Izod Impact strength	0.23 N.m/cm	ASTM D-256
Fire Resistance	Self extinguishing	ASTM D-635
Specific Gravity	1.94	
Barcol hardness	55 full cure	ASTM D-2583
Maximum Operating temperature	94 ⁰	
Application temperature	13 ⁰ C to 35 ⁰ C	
Packaging	Resin 8.6 kg Hardener 0.34 kg	
Shelf Life	2 years in dry storage	

Estimating Data

8.64 kg kit of Chockfast Black = 4.3 litres

Application Directions

Construct a chock mold around one or more anchor bolts using open cell foam damming material on three sides. Wrap the shank of the anchor bolt with tape, cover with foam pipe insulation or coat with non-melt grease to prevent the CHOCKFAST from sticking to it and to seal the bolt hole. Place a metal dam 1/2" to 3/4" (12mm to 18mm) from the mounting pad and seal with caulk. Spray the inside of the mold and front metal dam with Release Agent. Mix and pour the epoxy as directed.

Grout Storage

- All grout materials should be stored in a dry, shaded area in original unopened containers. Recommended storage temperatures are 16° - 35° C.
- The materials have a shelf life in excess of 12 months.
- The grouting materials should be pre-conditioned to a minimum of 19° - 27° C for 24 to 48 hours before mixing and application.
- Construct a shelter over the foundation to protect the work area from the elements particularly during cold, wet or very hot conditions.

Foundation Preparation

- New concrete needs to be 21 to 28 days fully cured or have a compressive strength of 21 MPa and tensile strength of 2.1 MPa. In order to insure a good bond of epoxy to the concrete, check that hydration has ceased.
- The concrete should be chipped to remove all laitance and 50% of the aggregate exposed to provide a rough bonding surface for the epoxy. Dowels should be installed on new exposed concrete to prevent edge lifting.
- The concrete foundation should be dry and oil free before the pouring of grout.
- Form as for concrete using good quality form material. Fit 30mm x 45mm chamfer pieces. Wax or grease all surfaces of forming in contact with resin. Seal all gaps with suitable mastic or putty
- Sleeve all foundation bolts in way of resin to prevent adhesion and to allow bolt stretch. *Construct header boxes if resin has to flow more than one metre.

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Preparation of Baseplates or Soleplates

- All 90° angles on steelwork in contact with the epoxy should be rounded to reduce stress concentrations in the grout. Round shim stock is preferred.
- Surfaces of baseplates or soleplates in contact with grout should be sandblasted to a clean, oil free, dry surface. Epoxy primer can be applied to the clean metal surfaces to prevent rusting.

Mixing

- Pour contents of Hardener into Compound container and mix thoroughly for 5 minutes with a suitable blade fitted to a 400 rpm power mixer. Ensure all material around bottom and sides of can is incorporated.

Pouring

- Pour the **Chockfast® Black** as soon as possible after mixing.

Work Time (Pot Life)

45 minutes @ 21°C

Cure Time

48 hours @ 15°C

36 hours @ 18°C

24 hours @ 21°C

18 hours @ 26°C

- Protect newly poured Chockfast Black from sudden temperature changes and direct sunlight.

Packaging

Chockfast® Black is available in 8.6 kg kits. Each pack contains hardener and resin in correct proportions for use.

Ordering information:

8.6 kg #

Safety Precautions

Avoid contact with skin and avoid breathing vapour. Wear gloves and goggles when mixing and using. Keep away from children. Provide adequate ventilation if applied in confined spaces. If poisoning occurs call Doctor or Poisons Information Centre. If swallowed **DO NOT** induce vomiting. Give plenty of water or milk. If skin contact occurs remove any contaminated clothing and wash affected area thoroughly with soap and water.

TDG Code: Hardener - UN 2735 Compound - Not Classified

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Note

The figures quoted for work time, cure time and coverage are not definitive. They are dependent on job site conditions and will vary accordingly. In all cases we endeavour to provide typical figures for use as a guide.

Health & Safety Information

The product is hazardous. A Material Safety Data Sheet is available from the ITW Polymers & Fluids Technical Department upon request or available on our website www.epirez.com.au.

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